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WATER SUPPLY OUTLOOK CURRENT SERIAL RECORDS
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
COLORADO and NEW MEXICO

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE
and
COLORADO AGRICULTURAL EXPERIMENT STATION,
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies
named above in cooperation with the Bureau of Reclamation,
U.S. Forest Service, National Park Service and other Federal,
State, and private organizations.

||||||| AS OF |||||||
APR. 1, 1962

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Cooperative Snow Survey and Water Supply Forecast Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
COLORADO AND STATE OF UTAH	MONTHLY (JAN.-JUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER AND OTHER AGENCIES
COLUMBIA	MONTHLY (JAN.-MAY)	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
UPPER MISSOURI AND STATE OF MONTANA	MONTHLY (FEB.-JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
WEST-WIDE	OCT. 1, APR. 1, MAY 1	PORTLAND, OREGON	ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MAR.-MAY)	PALMER, ALASKA	ALASKA S.C.D.
ARIZONA	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO	MONTHLY (FEB.-MAY)	FORT COLLINS, COLORADO	COLO. AGR. EXP. STATION COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO	MONTHLY (FEB.-MAY)	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
NEVADA	MONTHLY (JAN.-MAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JAN.-JUNE)	PORTLAND, OREGON	ORE. AGR. EXP. STATION OREGON STATE ENGINEER
WASHINGTON	MONTHLY (FEB.-JUNE)	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER

Copies of these various reports may be secured from:

Head, Water Supply Forecasting Section
Soil Conservation Service
P.O. Box 4170, Portland 8, Oregon

PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	COMPTROLLER, WATER RIGHTS BR., DEPT. OF LANDS AND FORESTS, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIF. DEPT. OF WATER RESOURCES, SACRAMENTO, CALIF.

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND WATER SUPPLY FORECASTS
for

COLORADO RIVER, PLATTE RIVER
ARKANSAS RIVER AND RIO GRANDE
DRAINAGE BASINS

Issued

April 1, 1962

Report Prepared By
Jack N. Washichek, Snow Survey Supervisor
and
Don W. McAndrew, Assistant Snow Survey Supervisor
Fort Collins, Colorado

United States Department of Agriculture
Soil Conservation Service
and
Colorado Agricultural Experiment Station
Fort Collins, Colorado
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State Engineer of Colorado
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State Engineer
State of New Mexico

General Series Paper No. 767
Colorado Agricultural Experiment Station

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

as of
APRIL 1, 1962



* SNOW PACK DID NOT BUILD UP AS MUCH AS NORMALLY DURING *
* THE MONTH OF MARCH. *
* *
* DUE TO THE PREVIOUS MONTH'S ABOVE NORMAL SNOW FALL, *
* ALL AREAS OF COLORADO AND NEW MEXICO CAN STILL EXPECT *
* AN ADEQUATE SUPPLY OF WATER THIS SUMMER. MOST *
* MOUNTAINS AND PLAINS HAVE GOOD SOIL MOISTURE. *



COLORADO

Colorado's prospects for water supplies this summer are better than any time since 1957. March did not add materially to the snow pack, but soils are wet and all streams are being forecast higher than normal. Reservoir storage is good except on the Arkansas. Streamflow on the Arkansas should be high enough to relieve any reservoir shortages. Streams are currently running normal or better.



NEW MEXICO

This year should see some relief in the water situation that has persisted in New Mexico. All streams are forecast normal or above and with good soil moisture this should be a good water supply year.

The main stem of the Rio Grande is forecast higher than any time since 1957 and should help replace some of the depleted reservoir storage. Valley soils are reported as fairly wet.

WATER SUPPLY OUTLOOK

THE MAP ON THIS PAGE INDICATES THE MOST PROBABLE WATER SUPPLY AS OF THE DATE OF THIS REPORT. ESTIMATES ASSUME AVERAGE CONDITIONS OF SNOW FALL, PRECIPITATION AND OTHER FACTORS FROM THIS DATE TO THE END OF THE FORECAST PERIOD. AS THE SEASON PROGRESSES ACCURACY OF ESTIMATES IMPROVE. IN ADDITION TO EXPECTED STREAM-FLOW, RESERVOIR STORAGE, SOIL MOISTURE IN IRRIGATED AREAS, AND OTHER FACTORS ARE CONSIDERED IN ESTIMATING WATER SUPPLY. ESTIMATES APPLY TO IRRIGATED AREAS ALONG THE MAIN STREAMS AND MAY NOT INDICATE CONDITIONS ON SMALL TRIBUTARIES.



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WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca, Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin, Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan Rock Creek and Yuma Soil Conservation Districts.

YOUR



WATER

SUPPLY



YOUR WATER SUPPLY

R. D. Anderson¹

Water supplies for irrigation this year in Colorado will vary from slightly above normal to 150% of normal. The San Juan, Animas, San Miguel and Dolores drainages will be from normal to 10% above normal. All other drainages will be from 125 to 150% of normal.

This favorable outlook for irrigation water is due to three things. These are: above normal snow pack, excellent soil moisture, and much greater reservoir storage than last year.

Before the irrigation season starts, find out from your irrigation or ditch company about how much water you are likely to receive and for how long over the season it will be available. **KNOW FOR SURE HOW MUCH WATER IS DELIVERED TO YOUR FARM.**

On the basis of this generally favorable irrigation water supply season, you should consider the following:

1. Acreages of high water using crops such as alfalfa, irrigated pasture, corn and sugar beets might be increased over last year. You can get assistance from your Soil Conservation Service Technician or County Agent in planning kinds and acres of crops with your expected water supply.
2. Maintain the soil fertility levels high enough so that lack of needed plant nutrients does not lower production.
3. Do not over-irrigate or waste water because it is plentiful as this may:
 - a. Leach out needed plant nutrients.
 - b. Increase seepage and salt problems or create new seep areas.
 - c. Increase erosion.
4. Consider doing some or all of the following if needed on your farm to make better use of available water:
 - a. Keep ditches clean.
 - b. Replace leaky, worn out structures such as gates and turnouts.
 - c. Line leaky ditches.
 - d. Do not keep irrigation sets on longer than necessary to replace the used water in the root zone area of each crop. Know the root zone depths and water holding capacities of your soils.
 - e. Do not use erosive heads of water.

YOUR SOIL CONSERVATION SERVICE TECHNICIAN CAN HELP YOU ON ALL OF THESE ITEMS.

¹ R. D. Anderson, State Soil Conservationist, Soil Conservation Service, Denver, Colorado, Water Supply Outlook and Federal-State Private Cooperative Snow Survey for Colorado and New Mexico, April 1, 1962.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
April 1, 1962

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO

SNOW COVER

Snow cover over the entire South Platte watershed averages 115% of normal. Warm temperatures and below normal snow fall during the past month decreased the low elevation snow pack since March 1. Water content of the snow pack ranges from 75% of normal at low elevations to 160% at the higher levels. Boulder Creek is the only tributary with below normal snow pack.

SOIL MOISTURE

Soil moisture in the South Platte watershed is near record high. This condition will increase the flow expected from the melting snows.

RESERVOIR STORAGE

Water stored in the reservoirs on the South Platte watershed is about 140% of normal. This water will be an excellent supplement to the spring runoff for irrigation this summer.

EXPECTED STREAMFLOW

Above average streamflow, soil moisture and reservoir storage are all bright prospects for good water supply this coming season. Tributaries to the South Platte River vary from 107% of normal on the Saint Vrain to 130% on the Big Thompson and Clear Creek Rivers.

'THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY'

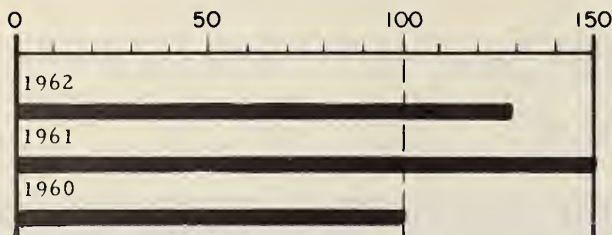
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K. W. Chalmers, State Conservationist,
Colorado

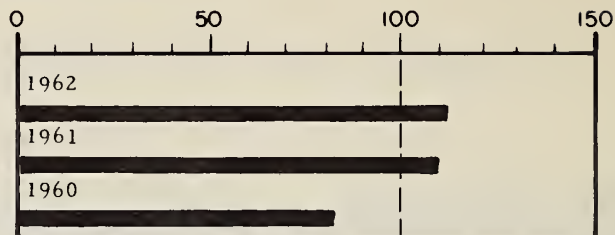
R. G. Wilson, Area Conservationist,
Littleton, Colorado

WATER SUPPLY OUTLOOK IN PERCENT OF 1943-57 AVERAGE

CACHE LA POUDRE - BOULDER



CLEAR CREEK - UPPER SOUTH PLATTE



RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1943 - 57
Antero	33.0	15.7	15.7	14.4
Barr Lake	32.2	24.9	28.7	21.3
Black Hollow	8.0	5.1	2.1	3.4
Boyd Lake	44.0	4.1	33.2	17.5
Cache La Poudre	9.5	8.6	7.2	6.6
Carter Lake *	108.9	102.6	85.6	64.8
Chambers Lake	8.8	6.6	2.0	2.1
Cheeseman	79.0	77.9	70.0	49.2
Cobb Lake	34.3	20.4	13.0	5.6
Eleven Mile	81.9	97.8	97.8	69.2
Fossil Creek	11.6	8.5	9.5	7.1
Gross	43.1	32.0	18.4	--
Halligan	6.4	4.6	4.9	2.0
Horsetooth *	143.5	135.1	112.2	99.4
Lake Loveland	14.3	7.8	7.8	5.7
Lone Tree	9.2	7.3	6.1	6.5
Mariano	5.4	4.8	4.0	2.6
Marshall	10.3	7.1	2.8	2.2
Marston	18.9	15.6	12.0	14.7
Milton	24.4	14.2	15.9	10.8
Standley	18.5	14.5	11.0	10.9
Terry Lake	8.2	5.9	5.4	4.4
Union	12.7	12.0	8.8	6.9
Windsor	18.6	14.0	11.2	9.8

MEASURED TO FIRST DEPTH

*Shorter Period.

SOIL MOISTURE

STATION	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alpine Camp	7.0	3.3	1.3	1.2
Beaver Dam	6.0	4.6	0.4	1.0
Feather	6.0	0.6	0.1	0.7
Guard Station	7.0	2.7	0.4	1.0
Hoop Creek	6.0	5.1	0.5	1.4
Hoosier Pass	7.0	4.6	0.1	1.7
Kenosha Pass	7.0	1.6	0.1	1.7
Laramie Road	7.0	--	--	1.7
Two Mile	8.0	5.4	0.7	2.6
Clear Creek	8.0	4.2	0.5	1.3

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1943-57
Big Thompson at Drake (2)	142	134	106
Boulder at Orodell	64	116	55
Cache La Poudre at Canon(1)	210	111	189
Clear Creek at Golden (3)	180	130	137
Saint Vrain at Lyons	93	111	84

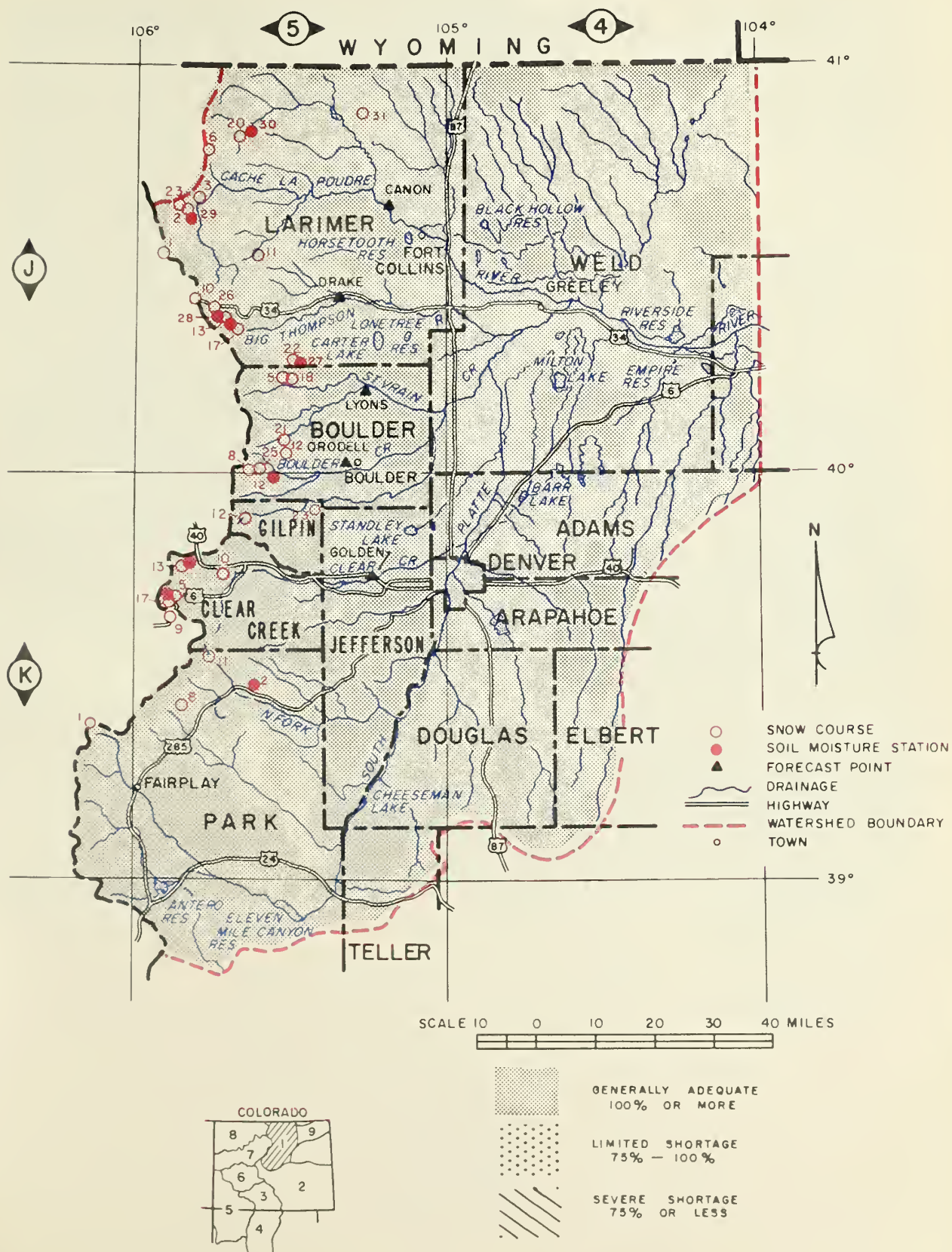
PRECIPITATION

STATION	AUGUST THROUGH NOVEMBER AVE. DEP.		WINTER AVE. DEP. Dec-Feb	
Upper South Platte	8.07	+3.71	2.06	+4.47

PRELIMINARY U.S. WEATHER BUREAU DATA
AVERAGE OF SELECTED STATIONS

- (1) Observed flow minus diversions from Michigan, Colorado and Laramie rivers, plus diversions for irrigation and municipal use above station.
- (2) Observed flow plus by-pass to power plants.
- (3) Observed flow minus diversions through Jones Tunnel.

SOUTH PLATTE RIVER WATERSHED IN COLORADO



SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1943 - 57
SOUTH PLATTE RIVER AND TRIBUTARIES						
Baltimore	5K23	3/30	31	9.1	7.8	--
Berthoud Falls	5K13	3/30	48	13.2	10.7	14.6*
Big South	5J3	4/1	9	2.1	2.6	2.7
Boulder Falls	5J25	3/30	47	12.5	11.6	15.4*
Cameron Pass	5J1	3/29	99	38.9	22.3	24.9
Chambers Lake	5J2	4/1	37	10.1	6.7	8.8
Copeland Lake	5J18	3/29	13	4.0	4.3	5.3*
Deadman Hill	5J6	3/28	56	17.2	15.4	16.8
Deer Ridge	5J17	3/31	29	9.4	4.3	5.9*
Empire	5K10	3/30	36	9.7	8.0	7.8*
Geneva Park	5K11	NS	--	--	2.6	4.2*
Grizzly Peak (B)	5K9	3/27	64	21.3	16.3	18.9
Hidden Valley	5J13	3/30	53	16.1	10.3	12.4
Hoosier Pass	6K1	3/30	49	15.3	10.4	13.1
Hour Glass Lake	5J11	3/28	26	6.9	6.2	9.2
Jefferson Creek	5K8	3/28	37	11.7	8.4	9.8
Lake Irene (B)	5J10	3/27	74	31.7	14.1	22.9
Long's Peak	5J22	3/31	43	11.8	7.3	11.7*
Lost Lake	5J23	4/1	47	13.1	8.5	11.8*
Loveland Pass	5K5	3/29	55	19.2	15.3	15.8
Loveland Lift No. 1	5K24	3/27	88	30.7	21.5	--
Pine Creek	5J31	3/29	6	2.3	5.2	--
Red Feather	5J20	3/29	29	7.6	8.9	8.8
Two Mile	5J26	3/30	70	23.3	11.9	15.3*
University Camp	5J8	3/30	65	21.5	16.5	24.5
Ward	5J21	3/29	25	6.8	7.5	7.1*
Wild Basin	5J5	3/30	41	10.1	11.1	15.0

NOTE: * - 1943 - 57 (ADJUSTED AVERAGES)

NS - NO SURVEY

(A) - AIR OBSERVED

(B) - ON ADJACENT DRAINAGE

This Report Prepared by

Jack N. Washichek and Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Ft. Collins, Colorado

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DEPARTMENT OF AGRICULTURE

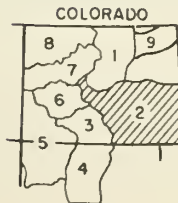
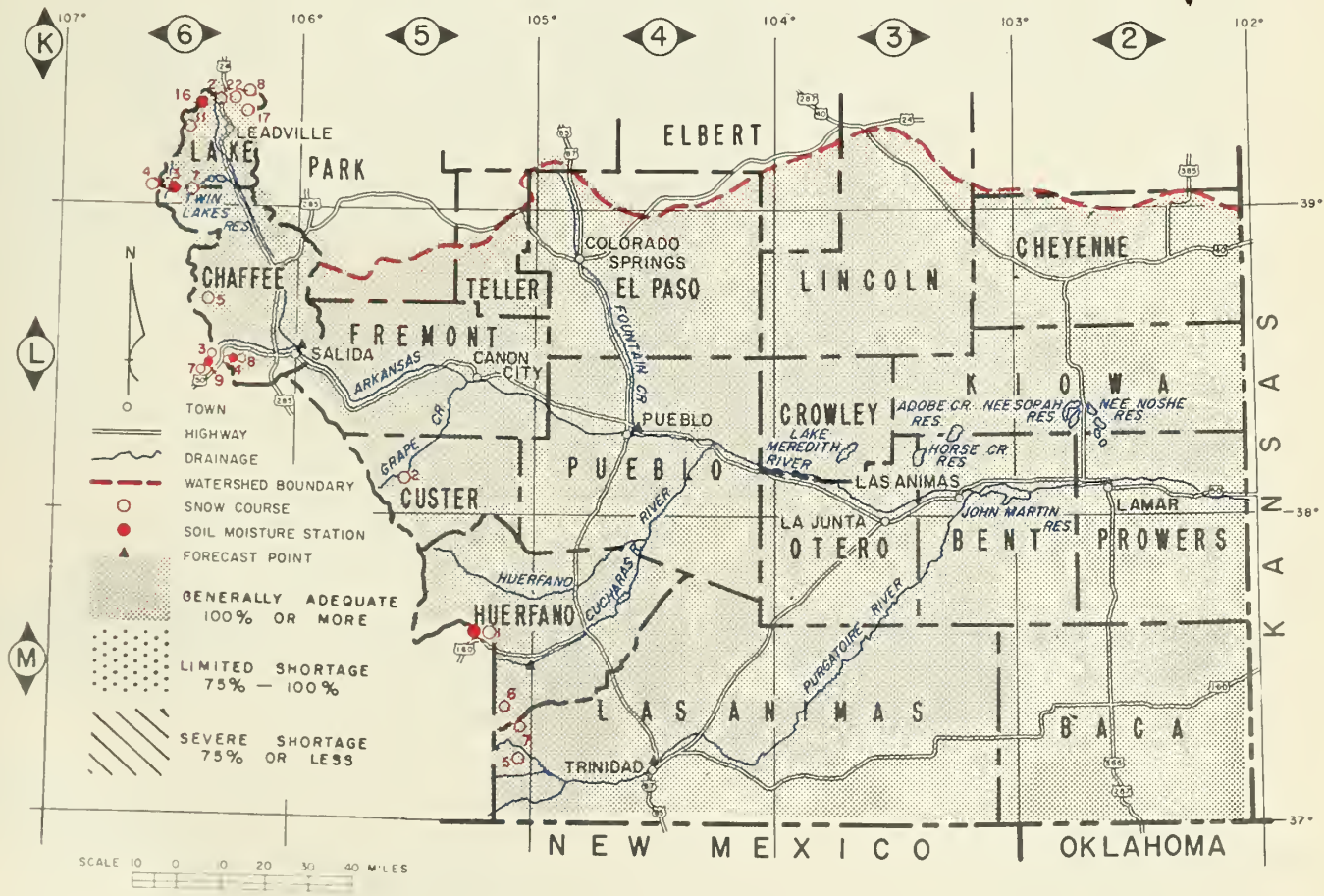
SOIL CONSERVATION SERVICE

Snow Survey
 Colorado State University
 Ft. Collins, Colorado

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ARKANSAS RIVER WATERSHED IN COLORADO



SNOW

SNOW COURSE	NO.	CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1943 - 57
ARKANSAS RIVER						
Blue Lakes	5M6	NS	--	--	--	--
Bigelow Divide	5L3	3/31	31	5.9	--	--
Bourbon	5M5	3/28	33	6.7	9.7	--
Cooper Hill	6K23	3/24	58	14.1	8.6	--
Cucharas Pass	5M7	NS	--	--	--	--
East Fork	6K17	3/28	40	11.2	7.2	9.9*
Four Mile Park	6K7	3/28	28	8.0	4.5	4.0
Fremont Pass	6K8	3/28	66	21.1	14.3	16.9
Garfield	6L8	3/28	52	18.4	14.9	--
LaVeta Pass (B)	5M1	3/29	28	9.2	10.0	8.1
Monarch Pass	6L4	3/28	65	22.7	18.4	18.6
St. Elmo (A)	6L5	3/31	60	17.4	9.7	12.5*
Tennessee Pass	6K2	3/28	45	12.8	8.6	10.0
Tomichi	6L7	3/28	46	14.4	10.4	--
Twin Lakes Tunnel	6K3	3/30	47	18.5	6.8	10.9
Westcliffe	5L2	3/30	29	4.7	8.2	6.0*

NOTE: * - 1943 - 57 (ADJUSTED AVERAGES)

NS - NO SURVEY

(A) - AIR OBSERVED

(B) - ON ADJACENT DRAINAGE

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Jack N. Washichek and Don W. McAndrew

Soil Conservation Service

Colorado State University

Ft. Collins, Colorado

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DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey

Colorado State University

Ft. Collins, Colorado

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

ARKANSAS RIVER WATERSHED IN COLORADO

as of

April 1, 1962

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO

SNOW COVER

Snow cover on the Arkansas River watershed decreased since March 1. The entire watershed is still 130% of the average for April 1. The basin is divided between excellent snow cover in the Northern areas to below normal snow pack in the South.

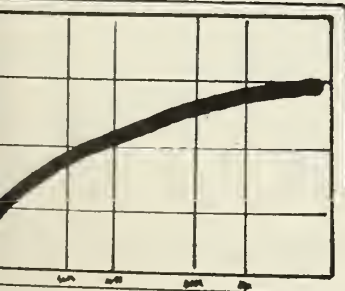
SOIL MOISTURE

The soil moisture over the entire basin remains high and is better than last year. This condition will add to the river flows this summer. Soil moisture in the valley is also reported as fair to good.

RESERVOIR STORAGE

Water held in storage on the Arkansas River is much better than last year and about 90% of normal. The Arkansas River is flowing near normal and should contribute some to storage.

EXPECTED STREAMFLOW



The Arkansas River and its tributaries will flow average to much above this season. The main stem is expected to flow 160% of normal. The Purgatoire and Cucharas Rivers should produce near normal water supplies this season.

'THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY'

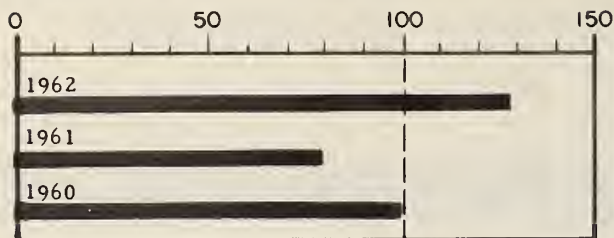
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K. W. Chalmers, State Conservationist,
Colorado

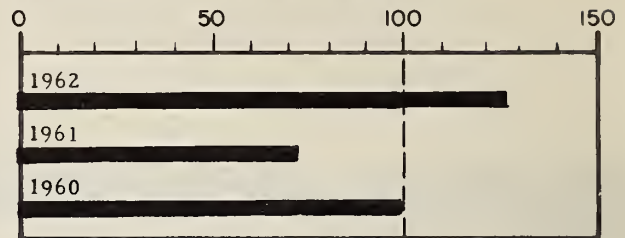
Dearl B. Beach, Area Conservationist,
Colorado Springs, Colorado
Will D. McCorkle, Area Conservationist,
Lamar, Colorado

WATER SUPPLY OUTLOOK IN PERCENT OF 1943-57 AVERAGE

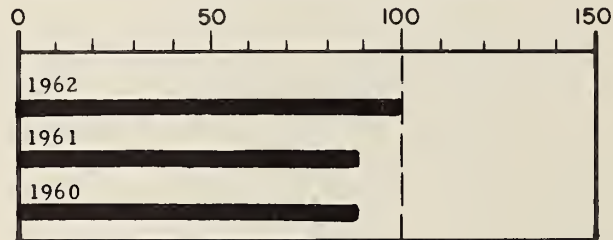
ARKANSAS ABOVE CADDOA DAM



ARKANSAS BELOW CADDOA DAM



PURGATOIRE - CUCHARAS - HUERFANO



RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1943 - 57
Adobe Creek	61.6	0	0	22.0
Clear Creek	11.4	10.4	5.5	5.8
Cucharas	40.0	8.0	2.1	4.5
Great Plains	150.0	39.9	22.9	50.8
Horse Creek	26.9	12.3	0	7.3
John Martin	366.6	34.0	20.9	58.8
Meredith	41.9	26.0	6.1	14.5
Model	15.0	4.8	5.1	2.5
Sugar Loaf	17.4	10.8	1.4	8.1
Twin Lakes	57.9	30.6	9.3	22.7

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Garfield	7.0	4.1	3.2	3.5
King	8.0	5.1	2.7	3.9
Lake Creek	6.0	3.8	2.5	3.5
LaVeta Pass	8.0	7.4	7.4	5.6
Leadville	7.0	0.5	0.4	1.2

ALL PROFILES 4 FEET DEEP

PRECIPITATION

STATION	AUGUST THROUGH NOVEMBER AVE. DEP.	WINTER AVE. DEP. Dec-Feb
Arkansas	8.36 +3.49	2.52 +.37

PRELIMINARY U.S. WEATHER BUREAU DATA
AVERAGE OF SELECTED STATIONS

STREAMFLOW FORECAST (1,000 AC. IN)

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1943-57
Arkansas at Pueblo (1)	550	160	342
Arkansas at Salida (1)	540	159	339
Cucharas near LaVeta	16	114	14
Purgatoire at Trinidad	52	100	52

(1) Observed flow plus change in storage in Clear Creek, Twin Lakes, and Sugar Loaf Reservoirs minus diversions through Busk-Ivanhoe and Twin Lake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine Ditches.

**WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE**

UPPER RIO GRANDE WATERSHED IN COLORADO

as of
April 1, 1962

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO

SNOW COVER

High elevation snow pack is much above normal while medium to low elevation snow has not increased much during the last month.

Head water areas of the Rio Grande, Alamosa and Conejos Rivers have high snow while snow pack on the Sangre de Cristo is barely normal.

SOIL MOISTURE

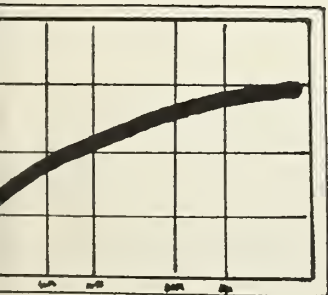
Snow pack over the entire basin is about 145% of normal.

Moisture held in the soil is excellent. Some soils are reported as almost saturated. Some snow melted at low elevations adding to the soil moisture. Actually soil moisture is 213% of average.

RESERVOIR STORAGE

Reservoir storage is just about normal. None of the reservoirs are anywhere near full, but will probably fill during the runoff period.

EXPECTED STREAMFLOW



Water supplies should be adequate with some storage possible from expected runoff. The only river not expected to flow much above average is the Culebra. Snow cover in this area is light.

Forecasts range from 170% of normal on the Upper Rio Grande to 100% on Culebra.

'THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY'

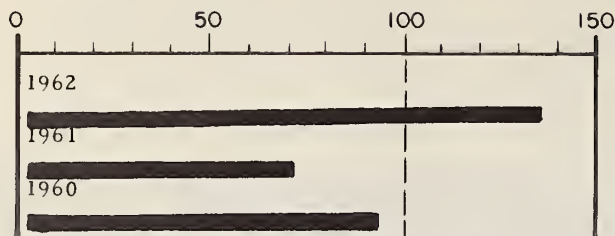
ISSUED BY: SOIL CONSERVATION SERVICE

K. W. Chalmers, State Conservationist,
Colorado

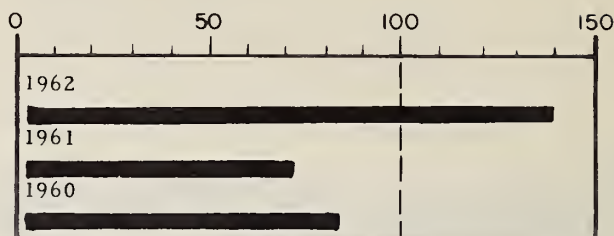
Benny Martin, Area Conservationist,
Monte Vista, Colorado

WATER SUPPLY OUTLOOK IN PERCENT OF 1943-57 AVERAGE

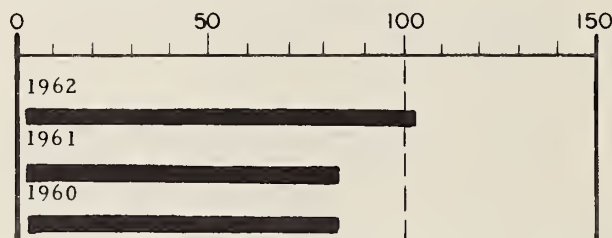
RIO GRANDE



ALAMOSA - CONEJOS



SANGRE DE CRISTO STREAMS



RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1943 - 57
Continental	26.7	6.2	4.9	7.8
Platoro	60.0	3.4	4.0	4.6
Rio Grande	45.8	12.8	7.9	12.6
Sanchez	103.2	12.5	7.0	9.9
Santa Maria	45.0	4.2	3.7	7.8
Terrace	17.7	8.2	3.2	3.0

MEASURED FIRST OF MONTH

PRECIPITATION

STATION	AUGUST THROUGH NOVEMBER		WINTER	
	Ave.	Dep.	Ave.	Dep.
Rio Grande (Colo.)	8.26	+3.74	1.3	-.14

PRELIMINARY U.S. WEATHER BUREAU DATA
AVERAGE OF SELECTED STATIONS

SOIL MOISTURE

STATION	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alberta Park	9.0	--	0.9	2.5
Bristol View	7.0	6.0	NS	1.8
LaVeta Pass	8.0	7.4	7.4	5.6
Mogote	7.0	6.7	0.6	2.0

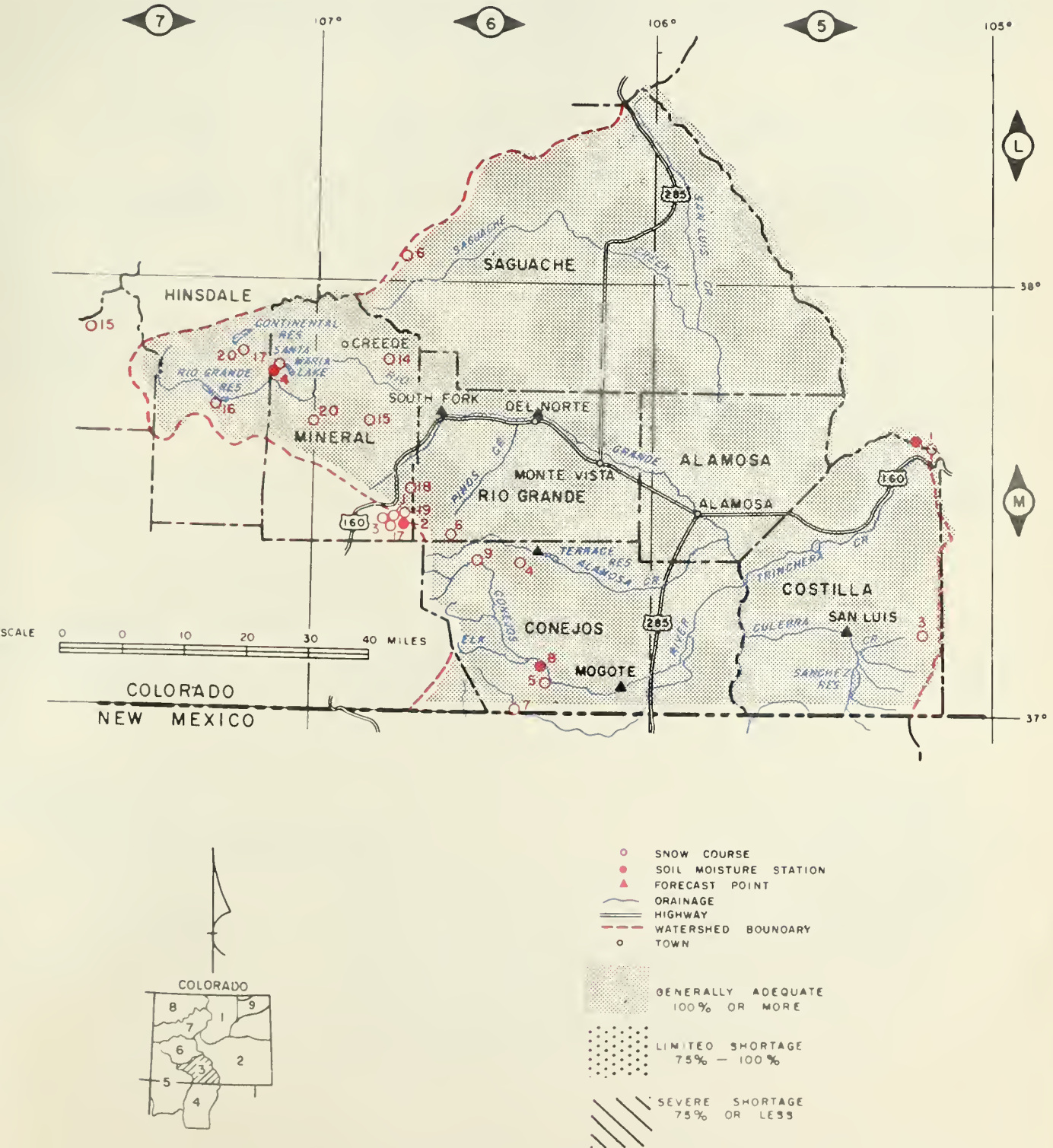
ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

STREAM AND STATION	APRIL THROUGH SEPTEMBER		THIS YEAR % AVERAGE	AVERAGE 1943-57
	FORECAST	APRIL - SEPT.		
Alamosa above Terrace	110		155	71
Conejos near Mogote	210		137	197
Culebra at San Luis (2)	24		100	24
Rio Grande nr. Del Norte				
(1)	750		153	491
Rio Grande at Thirty Mile				
Bridge (1)	190		170	112
South Fork at South Fork	164		136	121

- (1) Observed flow plus change in storage in Santa Maria Reservoir.
(2) Observed flow plus changes in storage in Sanchez Reservoir.

UPPER RIO GRANDE WATERSHED IN COLORADO



SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1943 - 57
RIO GRANDE IN COLORADO						
Cochetopa Pass	6L6	3/26	28	5.7	6.2	5.4*
Hiway	6M19	3/28	92	33.7	20.9	--
Lake Humphreys	6M15	3/28	38	11.3	4.1	6.3*
Pass Creek	6M18	3/28	53	17.7	8.3	—
Pool Table (A)	5M14	3/28	46	15.6	5.9	6.2*
Porcupine (A)	7M20	3/28	62	21.1	8.4	12.7*
Red Mountain Pass (B)	7M15	3/30	104	39.0	29.6	30.3*
Santa Maria	7M17	3/29	29	6.1	3.4	4.7
Upper Rio Grande	7M16	3/28	46	12.1	9.0	7.3
Wolf Creek Pass	6M1	3/28	96	40.8	19.5	30.5
Wolf Creek Summit (B)	7M17	3/28	111	38.1	24.7	29.5*
ALAMOSA RIVER						
Silver Lakes	6M4	3/28	36	9.5	6.7	6.1
Summitville (A)	6M6	3/28	83	29.9	16.9	20.5
CONEJOS RIVER						
Cumbres Pass	6M7	3/30	85	26.8	12.5	20.2
Platoro (A)	6M9	3/28	90	34.6	NS	18.7*
River Springs	6M5	3/28	32	9.2	6.2	7.3
SANGRE DE CRISTO RANGE (Colo.)						
Blue Lakes (B)	5M6	NS	--	--	--	--
Cucharas Pass (B)	5M7	NS	--	--	--	--
Culebra	5M3	4/1	38	9.6	9.3	9.9
LaVeta Pass	5M1	3/29	28	9.2	10.0	8.1

NOTE: * - 1943 - 57 (ADJUSTED AVERAGES)

NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

This Report Prepared by
Jack N. Washichek and Don W. McAndrew
Soil Conservation Service
Colorado State University
Ft. Collins, Colorado

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Colorado State University
Ft. Collins, Colorado

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OFFICIAL BUSINESS

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

RIO GRANDE WATERSHED IN NEW MEXICO

as of
April 1, 1962

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO

SNOW COVER

Snow cover varies from slightly above normal at low to medium elevations to much above normal at the high elevations. The snow pack in New Mexico is 138% of the 15-year normal while in Colorado snow is 145% of average. Snow increase was greater in New Mexico during March than in Colorado.

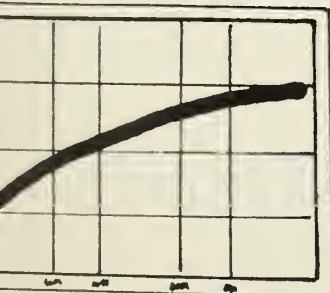
SOIL MOISTURE

Soil moisture in the mountain areas of both states is excellent. Reporting stations indicate soils contain far more moisture than last year and considerably more than normal. This will increase the runoff this summer. Valley soils are reported as fair to good.

RESERVOIR STORAGE

Carry-over storage is below average and less than last year at this time. This condition should improve this year. Some storage should be possible with expected runoff.

EXPECTED STREAMFLOW



Streamflow should be more than adequate this summer. All streams are forecasted above normal. Because of the choice of 15-year normals, forecasts are much above average. Using Elephant Butte normals, flow of Rio Grande at San Marcial is forecasted at 132% while using 15-year, 1943-57 normal, expected flow is 212%. Flow on Canadian and Pecos Rivers should be good.

'THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY'

ISSUED BY: SOIL CONSERVATION SERVICE

Courtney A. Tidwell, State Conservationist,
New Mexico

H. M. Cavett, Area Conservationist,
Santa Fe, New Mexico

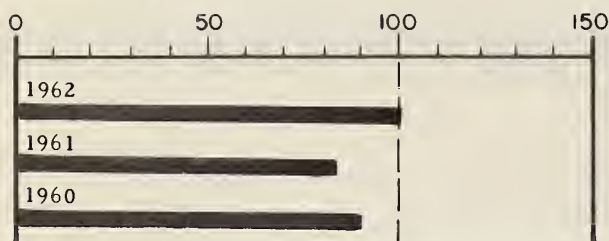
WATER SUPPLY OUTLOOK IN PERCENT OF 1943-57 AVERAGE

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1943 - 57
Alamogordo	122.1	85.0	122.1	47.4
Caballo	344.0	69.2	83.2	155.7
Elephant Butte	2206.8	347.3	355.2	581.2
El Vado	194.5	2.5	6.5	34.9
McMillan-Avalon	44.5	34.0	36.0	13.7
Red Bluff (Tex)	307.0		122.0	81.1
Conchas	600.0	269.9	279.4	262.5

MEASURED FIRST OF MONTH

RIO CHAMA

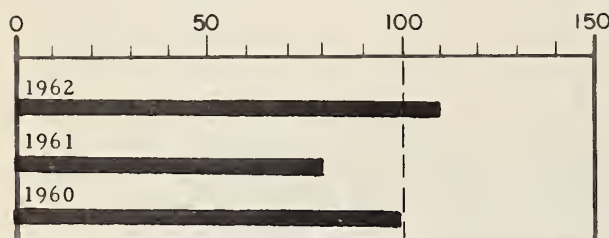


PRECIPITATION

STATION	AUGUST THROUGH NOVEMBER		WINTER	
	AVE.	DEP.	AVE.	DEP.
			Dec-Feb	
Lower Rio Grande	5.52	+1.84	1.32	+1.10
Middle Rio Grande	9.05	+2.72	3.67	+3.36
Upper Rio Grande	8.26	+3.74	1.37	-1.14

PRELIMINARY U.S. WEATHER BUREAU DATA
AVERAGE OF SELECTED STATIONS

UPPER RIO GRANDE

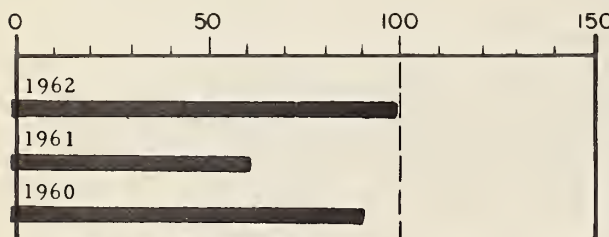


SOIL MOISTURE

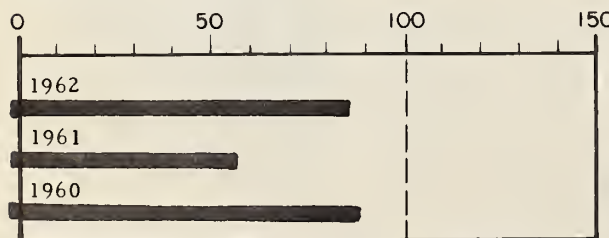
STATION	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alberta Park (Colo)	9.0	—	0.9	2.5
Aqua Piedra	7.2	4.3	5.0	2.7
Bateman	6.7	3.4	1.7	2.9
Big Tesuque	3.7		0.9	1.7
Bristol View (Colo)	7.0	6.0	NS	1.8
Chamita (New Mex.)	8.0	5.4	NS	3.1
Fenton Hill	6.5		6.5	—
Mogote (Colo)	7.0	6.7	0.6	2.0
Red Summit	4.8	0.3	0.7	0.9
Rio En Medio	3.5		0.2	0.2
Taos Canyon	3.3	6.7	3.0	2.1

ALL PROFILES 4 FEET DEEP

MIDDLE RIO GRANDE



LOWER RIO GRANDE



STREAMFLOW FORECAST (1,000 AC. FT.)

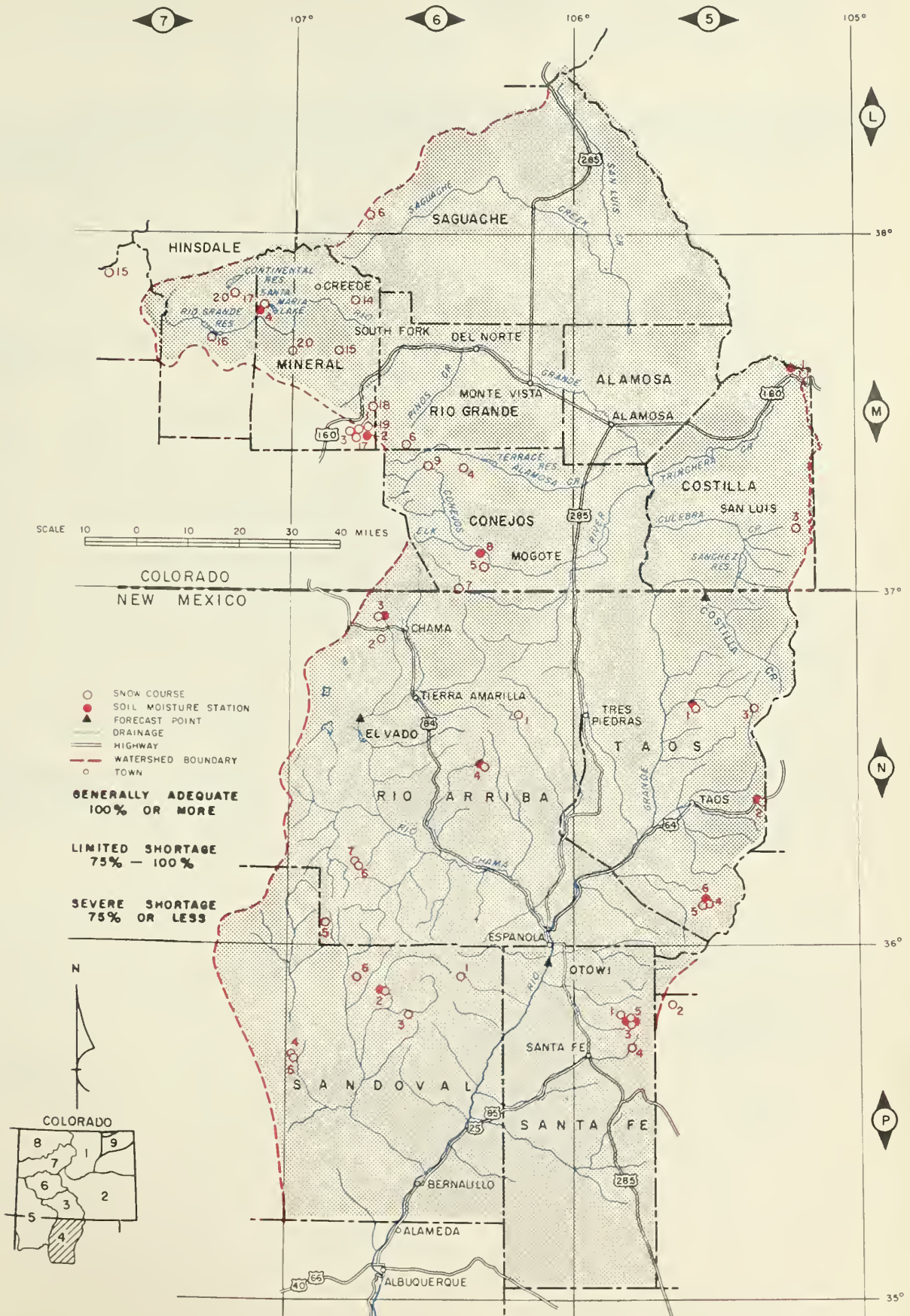
STREAM AND STATION	APRIL THROUGH SEPTEMBER		THIS YEAR % AVERAGE	AVERAGE 1943-57
	FORECAST APRIL - SEPT.			
Costilla at Costilla	29	107	27	
Pecos at Pecos	75	156	48	
Rio Chama nr. La Puente	300	143	210	
Rio Grande at Otowi (10)*	1195	189	633	
Rio Grande at San Marcial (10)*	920	212	434	

(10) Observed flow plus changes in storage in Santa Maria, Rio Grande, Continental, Terrace, Sanchez, Platoro and El Vado Reservoirs.

* Rio Grande at Otowi and Rio Grande at San Marcial Forecast and Average Mar-July inclusive.

Rio Grande at San Marcial is Forecast at 132% of the Elephant Butte Irrigation District's Normal.

RIO GRANDE WATERSHED IN NEW MEXICO



SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1943 - 57
RIO GRANDE (COLORADO & NEW MEXICO)						
Cochetopa Pass (Colorado)	6L6	3/26	28	5.7	6.2	5.4*
Culebra	5M3	4/1	38	9.6	9.3	9.9
Cumbres Pass	6M7	4/1	85	26.8	12.5	20.2
Hiway	6M19	3/28	92	33.7	20.9	--
Lake Humphreys	6M15	3/28	38	11.3	4.1	6.3*
LaVeta Pass	5M1	3/29	28	9.2	10.0	8.1
Pass Creek	6M18	3/28	53	17.7	8.3	--
Platoro (A)	6M9	3/28	90	34.6	NS	18.7*
Pool Table(A)	6M14	3/28	46	15.6	5.9	6.2*
Porcupine (A)	7M20	3/28	62	21.1	8.4	12.7*
River Springs	6M5	3/28	32	9.2	6.2	7.3
Santa Maria	7M17	3/29	29	6.1	3.4	4.7
Silver Lakes	6M4	3/28	36	9.5	6.7	6.1
Summitville	6M6	3/28	83	29.9	16.9	20.5
Upper Rio Grande	7M16	3/28	46	12.1	9.0	7.3
Wolf Creek Pass	6M1	3/28	96	40.8	19.5	30.5
Wolf Creek Summit	6M17	3/28	111	38.1	24.7	29.5*
Aspen Grove (New Mexico)	5P1	3/29	19	5.8	4.6	2.7
Bateman	6N4	2/28	48	12.5	17.3	11.9*
Big Tesuque	5P3	3/29	21	5.6	5.9	4.5
Chama Divide	6N2	3/30	10	3.5	1.5	1.7
Chamita	6N3	3/30	37	10.5	8.5	8.5
Cordova	5N5	3/26	46	13.3	11.7	11.1
Elk Cabin	5P4	3/29	8	3.2	1.7	2.4*
Fenton Hill	6P2	NS	--	--	3.7	2.3*
Hematite Park	5N3	3/30	19	5.5	4.5	4.4
Panchuela	5P2	4/1	14	4.1	2.7	1.4
Payrole	6N1	3/29	37	9.3	NS	7.9
Quemazon	6P1	3/30	42	12.3	13.9	5.7*
Red River	5N1	3/30	32	9.4	5.5	6.9
Rio En Medio	5P5	3/29	37	10.6	6.6	5.8*
Taos Canyon	5N2	3/30	23	7.5	2.4	5.1
Tres Ritos	5N4	3/27	24	7.1	6.8	4.2

NOTE: * - 1943 - 57 (ADJUSTED AVERAGES)

(A) - AIR OBSERVED

(B) - ON ADJACENT DRAINAGE

NOTE: * - 1943 - 57 (ADJUSTED AVERAGES)
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

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**WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL - DOLORES - ANIMAS - SAN JUAN
WATERSHEDS IN COLORADO & NEW MEXICO
as of**

April 1, 1962

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO

SNOW COVER

Snow pack increased normally during March. As of April 1 snow pack over these drainages is excellent. Low elevation snow is not as high percentage wise as the higher elevation snow pack, but still above normal.

Snow over San Juan Basin is 129%, Animas 129% and Dolores 121% of the 15-year normal.

SOIL MOISTURE

Soil moisture in the mountain areas is excellent and should contribute to the spring runoff. Moisture in the valleys is reported as good. Some melting has already taken place at lower elevations.

RESERVOIR STORAGE

Storage in Vallecito Reservoir is 64,000 acre feet. This is more water in storage than any time since 1958. Groundhog contains 6,000 acre feet compared to 4,000 last year and a normal of 7,000 acre feet.

EXPECTED STREAMFLOW

Streamflows will be adequate for all agricultural use this summer.

Streams in these basins should flow in the vicinity of 140% of normal. Streamflow is about normal currently with some melt already occurring.

'THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY'

ISSUED BY: SOIL CONSERVATION SERVICE

K. W. Chalmers, State Conservationist,
Colorado

Benny Martin, Area Conservationist,
Monte Vista, Colorado

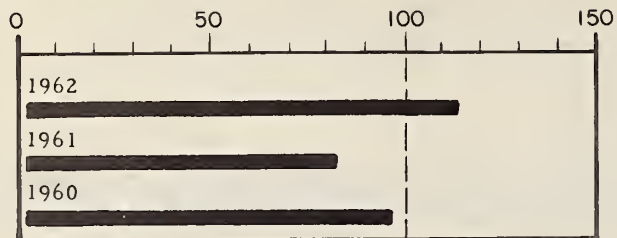
E. A. Nicholson, Area Conservationist *
Grand Junction, Colorado

C. A. Tidwell, State Conservationist,
New Mexico

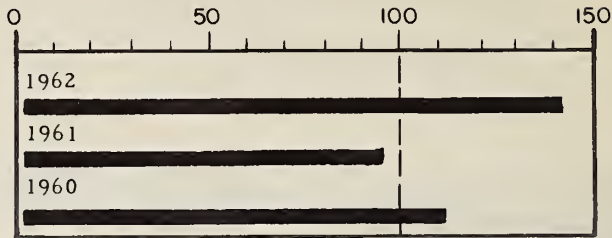
J. B. Christy, Area Conservationist
Albuquerque, N. M.

WATER SUPPLY OUTLOOK IN PERCENT OF 1943-57 AVERAGE

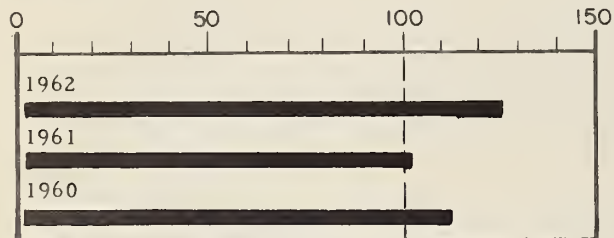
SAN JUAN



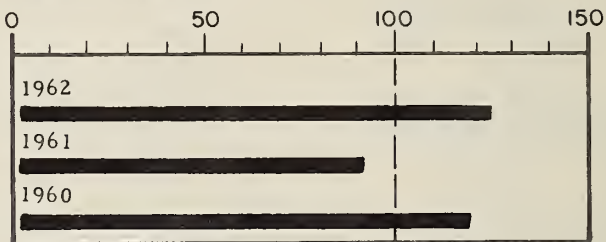
PIEDRA-PINOS-FLORIDA



DOLORES



ANIMAS-LA PLATA



RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1943 - 57
Groundhog	21.7	6.0	5.0	7.0
Vallecito	126.3	64.0	44.4	40.7

MEASURED FIRST OF MONTH

PRECIPITATION

STATION	AUGUST THROUGH NOVEMBER AVE. DEP.		WINTER AVE. Dec-Feb.	
Dolores	8.17	+2.19	3.93	-.78
San Juan	11.76	+4.04	5.92	+.53

PRELIMINARY U.S. WEATHER BUREAU DATA
AVERAGE OF SELECTED STATIONS

SOIL MOISTURE

STATION	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Cascade	7.0	5.0	NS	5.6
Dolores	7.0	2.6	4.8	1.8
Lizard Head	7.0	5.4	4.4	3.6
Mineral Creek	7.0	4.8	NS	4.2
Molas Lake	7.0	2.2	NS	2.7
Rico	7.0	4.9	3.9	2.9

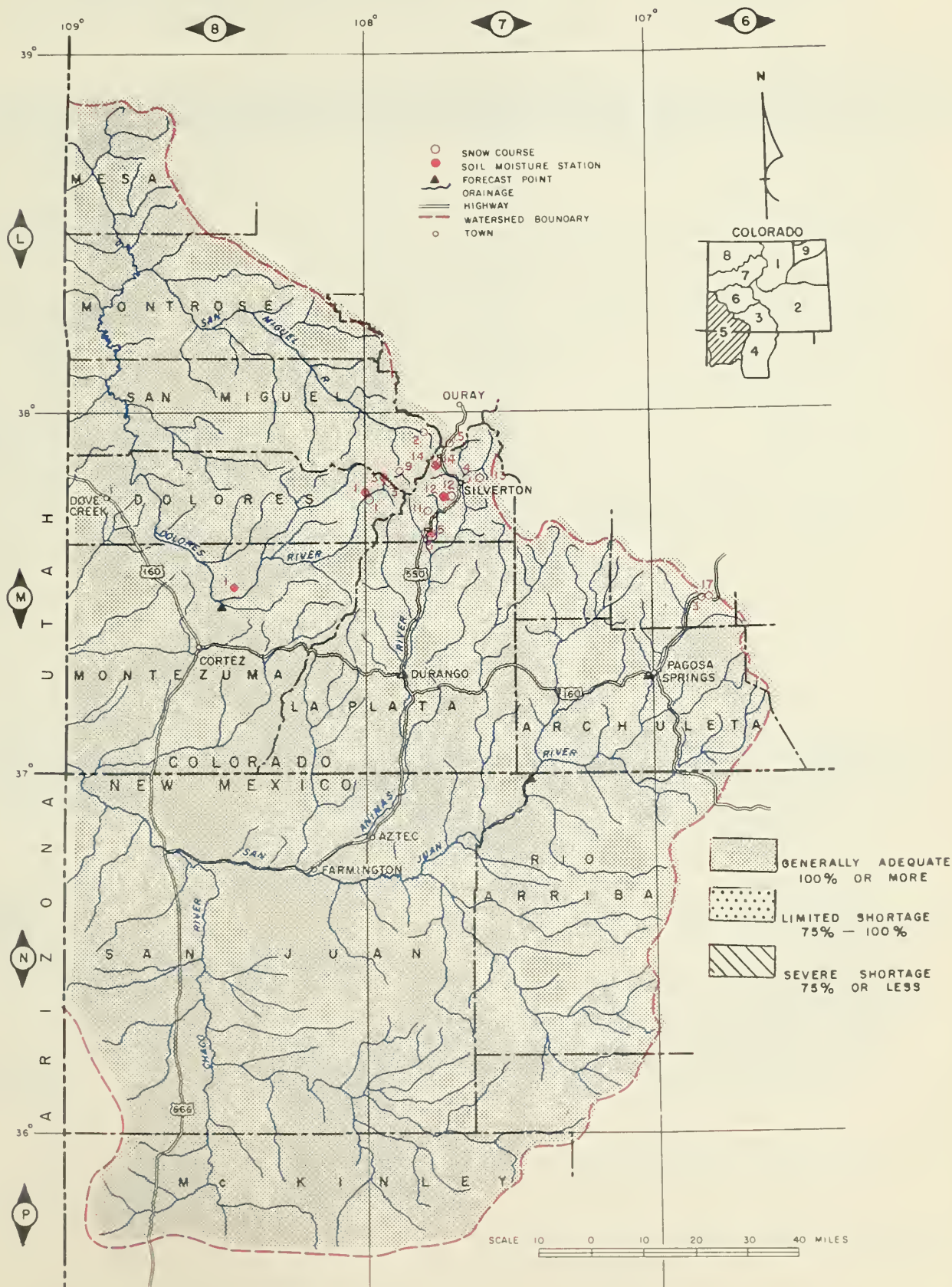
STREAMFLOW FORECAST (1,000 AC. FT.) APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1943-57
Animas at Durango	640	135	475
Dolores at Dolores	350	125	279
Florida near Durango	75	121	62
LaPlata at Hesperus	40	143	28
Los Pinos near Bayfield*	325	148	220
Piedra Creek near Piedra	270	145	186
San Juan at Rosa, N. Mex.	825	141	587

ALL PROFILES 4 FEET DEEP

* OBSERVED FLOW PLUS CHANGES IN
STORAGE IN VALLECITO RESERVOIR

SAN MIGUEL-DOLORES-ANIMAS-SAN JUAN RIVERS WATERSHEDS IN COLORADO & NEW MEXICO



SNOW

SNOW COURSE	NO.	CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1943 - 57
SAN JUAN RIVER						
Chama Divide (B) (New Mexico)	6N2	3/30	10	3.5	1.5	1.7
Chamita (B) (New Mexico)	6N3	3/30	37	10.5	8.5	8.5
Upper San Juan (Colorado)	6M3	3/28	108	40.8	26.5	33.9
Wolf Creek Pass (B)	6M1	3/28	96	40.8	19.5	30.5
Wolf Creek Summit	6M17	3/28	111	38.1	24.7	29.5*
ANIMAS RIVER						
Cascade	7M5	3/30	47	15.8	11.4	12.1
Howardville	7M13	3/30	50	14.9	NS	11.4*
Ironton Park (B)	7M6	3/29	48	14.2	13.0	13.1
Mineral Creek	7M14	3/30	58	17.7	13.4	14.1*
Molas Lake	7M12	3/30	55	18.8	10.4	13.7*
Red Mountain Pass	6M19	3/30	104	39.0	29.6	30.3*
Silverton Sub-Station	7M4	3/30	33	8.9	5.9	5.1
Spud Mountain	7M11	3/30	87	30.7	21.8	24.3*
DOLORES RIVER						
Lizard Head	7M3	3/28	66	21.9	14.9	17.6
Rico	7M1	3/28	31	10.2	6.0	7.7
Telluride	7M2	3/28	26	7.3	7.2	6.8
Trout Lake	7M9	3/28	55	15.5	11.0	13.2*

NOTE: * - 1943 - 57 (ADJUSTED AVERAGES)

NS - NO SURVEY

(A) - AIR OBSERVED

(B) - ON ADJACENT DRAINAGE

This Report Prepared by

Jack N. Washichek and Don W. McAndrew

Soil Conservation Service

Colorado State University

Ft. Collins, Colorado

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

GUNNISON RIVER WATERSHED IN COLORADO

as of

April 1, 1962

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO

SNOW COVER

Snow increase over the Gunnison basin was just about normal and remains about 133% of average. Snowfall was slightly below normal on the Uncompahgre. Last month snow was 136% of average compared to 121% this month on the Uncompahgre. Both drainages still have excellent snow packs.

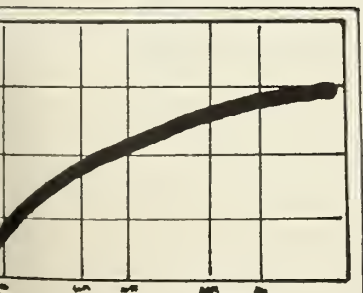
SOIL MOISTURE

Soil moisture as measured April 1 is still excellent. As a whole, the four soil moisture stations on this drainage are 165% of normal and all are much better than last year at this time.

RESERVOIR STORAGE

Taylor Park Reservoir contains more water on this date than any time since 1958. Storage then was high due to the good water year of 1957. The reservoir will easily fill this year. Taylor Reservoir contains 82,000 acre feet compared to a normal of 62,200 acre feet.

EXPECTED STREAMFLOW



Forecasts on Gunnison, Surface and Uncompahgre Rivers are all about 140% of normal. Uncompahgre is the only one being forecast less than last month. This is primarily due to the less than normal snow increase.

Water users will have an adequate water supply for their summer use.

'THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY'

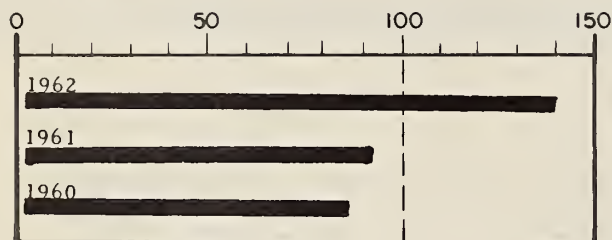
ISSUED BY: SOIL CONSERVATION SERVICE

K. W. Chalmers, State Conservationist,
Colorado

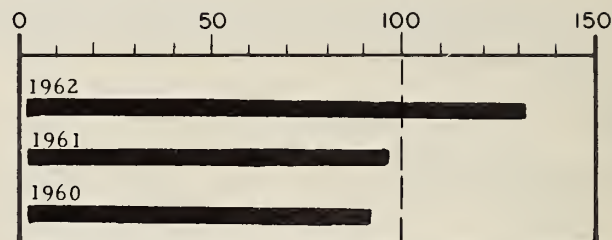
E. A. Nicholson, Area Conservationist,
Grand Junction, Colorado

WATER SUPPLY OUTLOOK IN PERCENT OF 1943-57 AVERAGE

GUNNISON



UNCOMPAHGRE



RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1943 - 57
Taylor	106.2	82.0	34.0	62.2

MEASURED FIRST OF MONTH

PRECIPITATION

STATION	AUGUST THROUGH NOVEMBER		WINTER	
	AVE.	DEP.	AVE.	DEP.
Gunnison	8.28	+3.83	5.22	+1.69

PRELIMINARY U.S. WEATHER BUREAU DATA
AVERAGE OF SELECTED STATIONS

SOIL MOISTURE

STATION	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
King	8.0	5.1	2.7	3.9
Maroon	8.0	7.2	0.1	1.6
Mineral Creek	7.0	4.8	NS	4.2
Placita	8.0	5.8	0.1	4.2

STREAMFLOW FORECAST (1,000 AC. FT.)

STREAM AND STATION	FORECAST APRIL SEPT.	THIS YEAR	AVERAGE 1943-57
		% AVERAGE	
Gunnison nr. Grand Jct.	1950	141	1386
Surface Cr. at Cedaredge	26	144	18
Uncompahgre at Colona	188	130	145

ALL PROFILES 4 FEET DEEP

GUNNISON RIVER WATERSHED IN COLORADO



SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1943 - 57
GUNNISON RIVER						
Alexander Lake	7K3	3/28	89	31.0	18.7	22.8
Black Mesa	7L5	Delayed	--	--	13.1	--
Blue Mesa	7L2	3/29	38	10.2	7.2	--
Cochetopa Pass (B)	6L6	3/26	28	5.7	6.2	5.4*
Crested Butte	6L1	3/27	55	19.8	11.1	15.3
Keystone	7L3	3/27	79	31.0	12.0	--
Lake City	7M8	3/28	40	9.4	6.9	8.6*
Long Draw	7L4	Delayed	--	--	7.4	--
Mesa Lakes (B)	7K4	3/28	59	20.4	13.6	17.4
Monarch Pass (B)	6L4	3/28	65	22.7	18.4	18.6
McClure Pass	7K8	3/28	60	26.9	9.6	15.8*
Mineral Creek (B)	7M14	3/30	58	17.7	13.4	14.1*
North Lost Trail (B)	7K1	3/28	56	26.2	10.3	15.7
Park Cone	6L2	3/23	56	16.3	8.1	12.3
Park Reservoir	7K6	3/28	94	34.8	20.3	26.8
Porphyry Creek	6L3	3/28	64	22.1	15.8	17.1
Trickle Divide (B)	7K5	3/28	99	37.4	22.6	28.9
Tomichi	6L7	3/28	46	14.4	10.4	--
UNCOMPAHGRE RIVER						
Iron-ton Park	7M6	3/29	48	14.2	13.0	13.1
Lizard Head	7M3	3/28	66	21.9	14.9	17.6
Red Mountain Pass (B)	7M15	3/30	104	39.0	29.6	30.3*
Telluride	7M2	3/28	26	7.3	7.2	6.8
Trout Lake	7M9	3/28	55	15.5	11.0	13.2*

NOTE: * - 1943 - 57 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by
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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

COLORADO RIVER WATERSHED IN COLORADO

as of

April 1, 1962

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO

SNOW COVER

Mountainous areas did not receive their normal amount of snow during March. Forecasts still remain high, because of the much above average snow pack layed down in the previous months. Currently some of the low elevation snow courses are below normal. The snow pack as a whole is about 125% of normal.

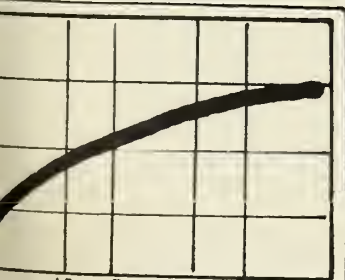
SOIL MOISTURE

Soil moisture remains excellent. All stations are above average and some areas have more moisture stored in the soil than ever recorded before. This will increase the runoff and is one reason some of the forecasts may seem high.

RESERVOIR STORAGE

Carry-over storage is excellent. Both Granby and Green Mountain Reservoirs indicate less than a month ago. Spring runoff should easily fill both reservoirs.

EXPECTED STREAMFLOW



Runoff on the Colorado River main stem and tributaries is being estimated at a low of 114% of normal on the Blue River to 152 % on the Roaring Fork.

Forecasts in some cases are higher than snow pack would indicate. This is primarily due to the excellent soil moisture.

THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY'

ISSUED BY: SOIL CONSERVATION SERVICE

K. W. Chalmers, State Conservationist,
Colorado

E. A. Nicholson, Area Conservationist
Grand Junction, Colorado
M. H. Weaver, Area Conservationist,
Glenwood Springs, Colorado

SNOW

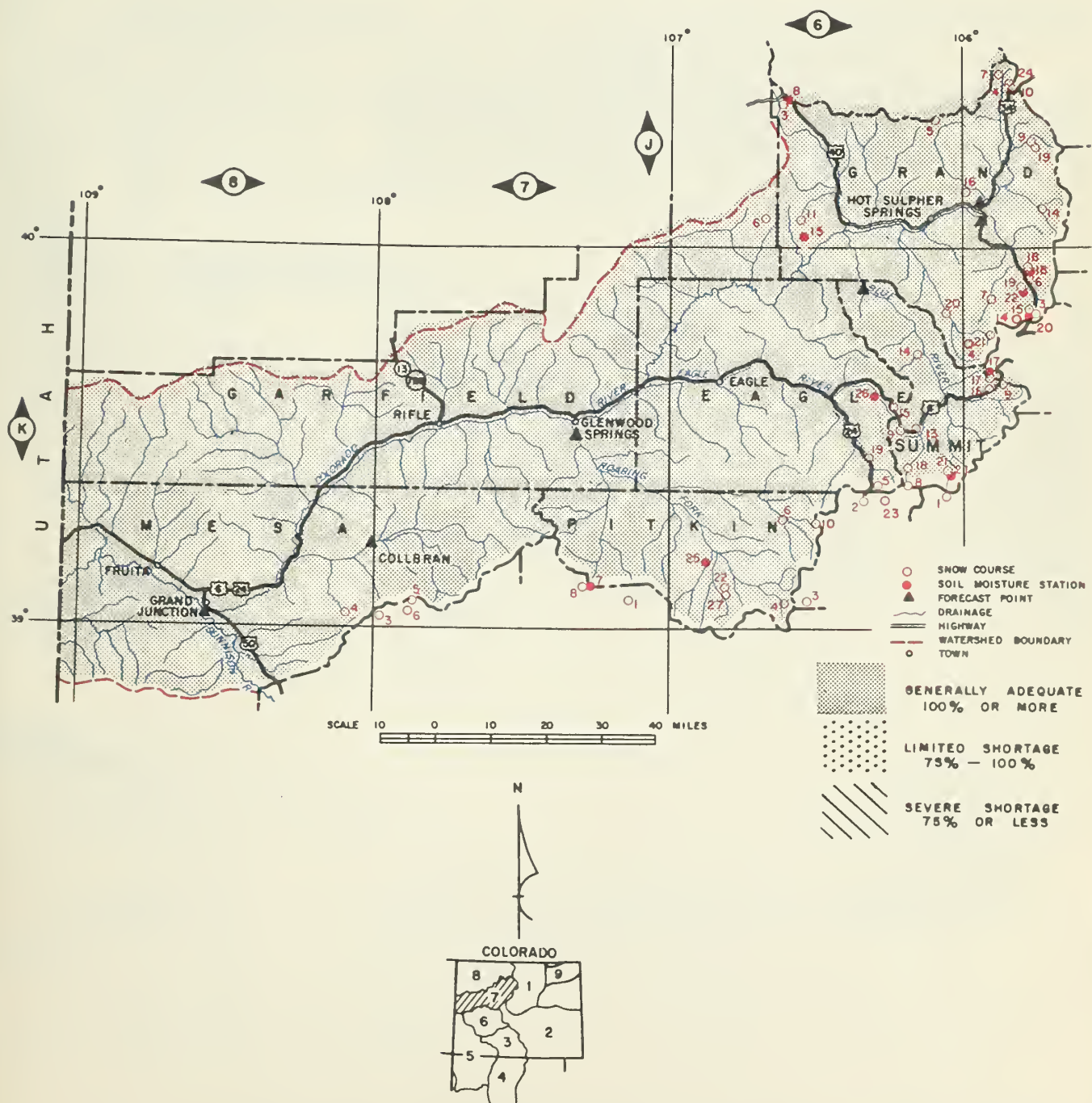
SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1943 - 57
COLORADO RIVER (UPPER)						
Arrow	5K6	3/29	49	14.2	9.7	11.6
Berthoud Pass	5K3	3/30	56	18.7	11.9	15.0
Berthoud Summit	5K14	3/30	66	22.1	18.2	18.8*
Blue River	6K21	3/30	36	9.9	5.4	--
Cooper Hill	6K23	3/24	58	14.1	8.6	--
Fiddlers Gulch	6K5	3/30	59	18.8	11.3	17.2
Fremont Pass	6K8	3/28	66	21.1	14.3	16.9
Frisco	6K13	3/29	33	8.2	5.7	8.7*
Glen Mar Ranch	6K20	3/28	38	11.1	7.3	8.6*
Gore Pass	6J11	3/28	43	14.7	6.6	10.9*
Granby	5J16	3/28	32	9.5	4.4	7.6*
Grand Lake	5J19	3/26	41	10.8	4.6	8.9*
Grizzly Peak	5K9	3/27	64	21.3	16.3	18.9
Hoosier Pass (B)	6K1	3/30	49	15.3	10.4	13.1
Jones Pass	5K21	3/28	52	17.3	12.6	--
Lake Irene	5J10	3/27	74	31.6	14.1	22.9
Lapland	5K7	3/29	42	12.4	5.5	12.1
Lulu	5J7	3/30	69	25.3	10.5	17.6
Lynx Pass	6K6	3/28	54	19.2	8.9	12.7
McKenzie Gulch	6K28	--	--	--	--	--
Middle Fork Camp Ground	5K4	3/28	36	11.0	8.2	9.7
Milner Pass	5J24	3/27	51	17.2	8.4	12.9*
Monarch Lake	5J14	3/29	43	10.7	6.8	10.8*
North Inlet Grand Lake	5J9	3/29	36	9.5	5.3	10.3
Pando	6K19	3/28	36	11.0	8.7	11.3*
Phantom Valley	5J4	3/27	40	13.2	6.8	10.8
Ranch Creek	5K18	3/29	42	10.9	6.9	--
Shrine Pass	6K9	3/28	66	19.8	13.3	18.3
Snake River	5K16	3/29	35	8.6	4.6	9.2*
Summit Ranch	6K14	3/29	30	8.0	5.7	9.3*
Tennessee Pass	6K2	3/28	45	12.8	8.6	10.0
Vail Pass	6K15	3/28	64	23.5	10.8	18.5*
Vasquez Creek	5K19	3/29	50	15.2	9.2	--
Willow Creek Pass	6J5	3/28	54	18.0	9.8	13.6
ROARING FORK RIVER						
Aspen	7J22	3/26	28	22.4	10.1	--
Independence Pass Tunnel	6K4	3/30	69	26.5	10.9	18.7
Ivanhoe	6K10	3/26	69	23.1	10.9	18.3*
Lift	7K27	3/26	81	30.3	16.6	--
McClure Pass	7K8	3/28	60	26.9	9.6	15.8*
Nast	6K6	3/28	30	6.1	2.8	6.1
North Lost Trail	7K1	3/28	56	26.2	10.3	15.7
PLATEAU CREEK						
Alexander (B)	7K3	3/28	89	31.0	18.7	22.8
Mesa Lakes	7K4	3/28	59	20.4	13.6	17.4
Park Reservoir (B)	7K6	3/28	94	34.8	20.3	26.8
Trickle Divide	7K5	3/28	99	37.4	22.6	28.9

NOTE: * - 1943 - 57 (ADJUSTED AVERAGES)

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 (A) - AIR OBSERVED
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 Soil Conservation Service
 Colorado State University
 Ft. Collins, Colorado

COLORADO RIVER WATERSHED IN COLORADO

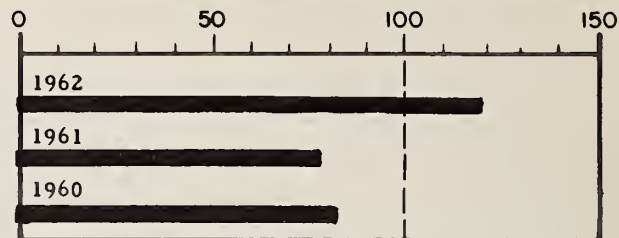


WATER SUPPLY OUTLOOK IN PERCENT OF 1943-57 AVERAGE

UPPER COLORADO ABOVE GLENWOOD SPRINGS



LOWER COLORADO BELOW GLENWOOD SPRINGS



RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1943 - 57
Granby *	465.5	334.4	224.2	197.5
Green Mt.	146.9	38.9	60.2	57.7

* Shorter Period

MEASURED FIRST OF MONTH

PRECIPITATION

STATION	AUGUST THROUGH NOVEMBER		WINTER	
	AVE.	DEP.	AVE.	DEP.
Upper Colorado	9.86	+4.59	5.10	+7.2
Lower Colorado	8.26	+3.61	3.81	+8.2

PRELIMINARY U.S. WEATHER BUREAU DATA
AVERAGE OF SELECTED STATIONS

SOIL MOISTURE

STATION	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Berthoud Pass	8.0	6.8	4.0	2.9
Blue River	7.0	5.7	0.1	1.5
Gore	7.0	6.3	0.5	3.9
Maroon	8.0	7.2	0.1	1.6
Muddy Pass	8.0	5.2	0.7	2.2
Placita	8.0	5.8	0.1	4.2
Ranch Creek	7.0	5.5	1.8	3.0
Vail Pass	8.0	6.0	0.8	3.7
Vasquez	7.0	--	4.2	4.3

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.) APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR	
		% AVERAGE	1943-57
Blue River abv. Green Mt. Dam	330	114	290
Colo. R. nr. Granby (4)	340	145	235
Colo. R. at Glenwood Sprg (5)	2100	136	1546
Plateau Cr. near Collbran	66	116	57
Roaring Fork at Gl. Spgs. (6)	1225	152	803
Williams Fork nr. Marshall	107	137	78
Willow near Granby	65	148	44

- (4) Observed flow plus diversions by Adams tunnel and Grand River ditch plus change in storage in Granby Reservoir.
- (5) Observed flow plus the changes as indicated in (4) plus Moffat Ditch.
- (6) Observed flow plus diversion through Twin Lakes tunnel.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
**YAMPA, WHITE, & NORTH PLATTE
RIVERS WATERSHEDS IN COLORADO**

as of
April 1, 1962

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO

SNOW COVER

Snow pack increased just about normally over this entire basin. Only two areas show much change over last month. The Little Snake basin got a little additional snow while the Elk received slightly less than usual snow fall. Snow fall over the basin remains above normal.

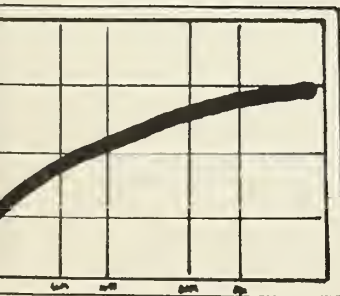
SOIL MOISTURE

Moisture stored in the high mountain soil is better than any time on record. There was some snow melt at low elevations. This contributed to the soil moisture and is probably the reason some stations are near saturation.

RESERVOIR STORAGE

There are no major reservoirs on these drainages in Colorado

EXPECTED STREAMFLOW



All streams in these basins should flow better than normally. The lowest flow expected will be over the Elk which is being forecast at only 111% of the 15-year normal.

Water supplies will be adequate in all areas this summer.

'THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY'

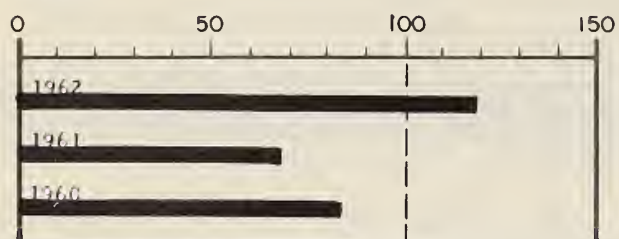
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K. W. Chalmers, State Conservationist,
Colorado

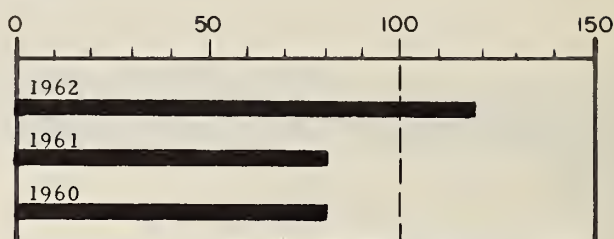
M. H. Weaver, Area Conservationist,
Glenwood Springs, Colorado

WATER SUPPLY OUTLOOK IN PERCENT OF 1943-57 AVERAGE

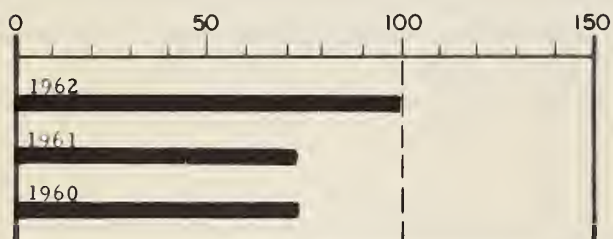
YAMPA



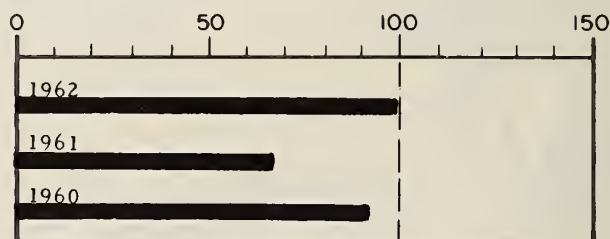
WHITE



LARAMIE



NORTH PLATTE



SOIL MOISTURE

STATION	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Hahn's Peak	8.0	8.0	6.0	—
Laramie Road	7.0		NS	1.7
Muddy Pass	8.0	5.2	0.7	2.2
Two Mile	8.0	5.4	0.7	2.6
Willow Pass	7.0	6.0	0.6	2.7

STREAMFLOW FORECAST (1,000 AC. FT.) APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1943-57
Elm at Clark	240	111	215
Laramie at Jelm	147	130	113
Little Snake at Lilly	520	149	350
North Platte at Northgate			255
White at Meeker	420	125	335
Yampa at Steamboat Sprgs.	350	124	283

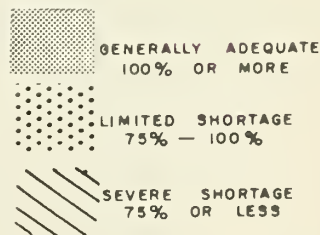
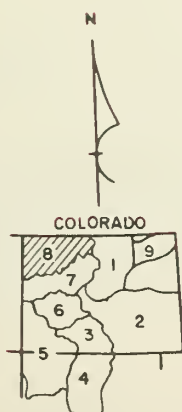
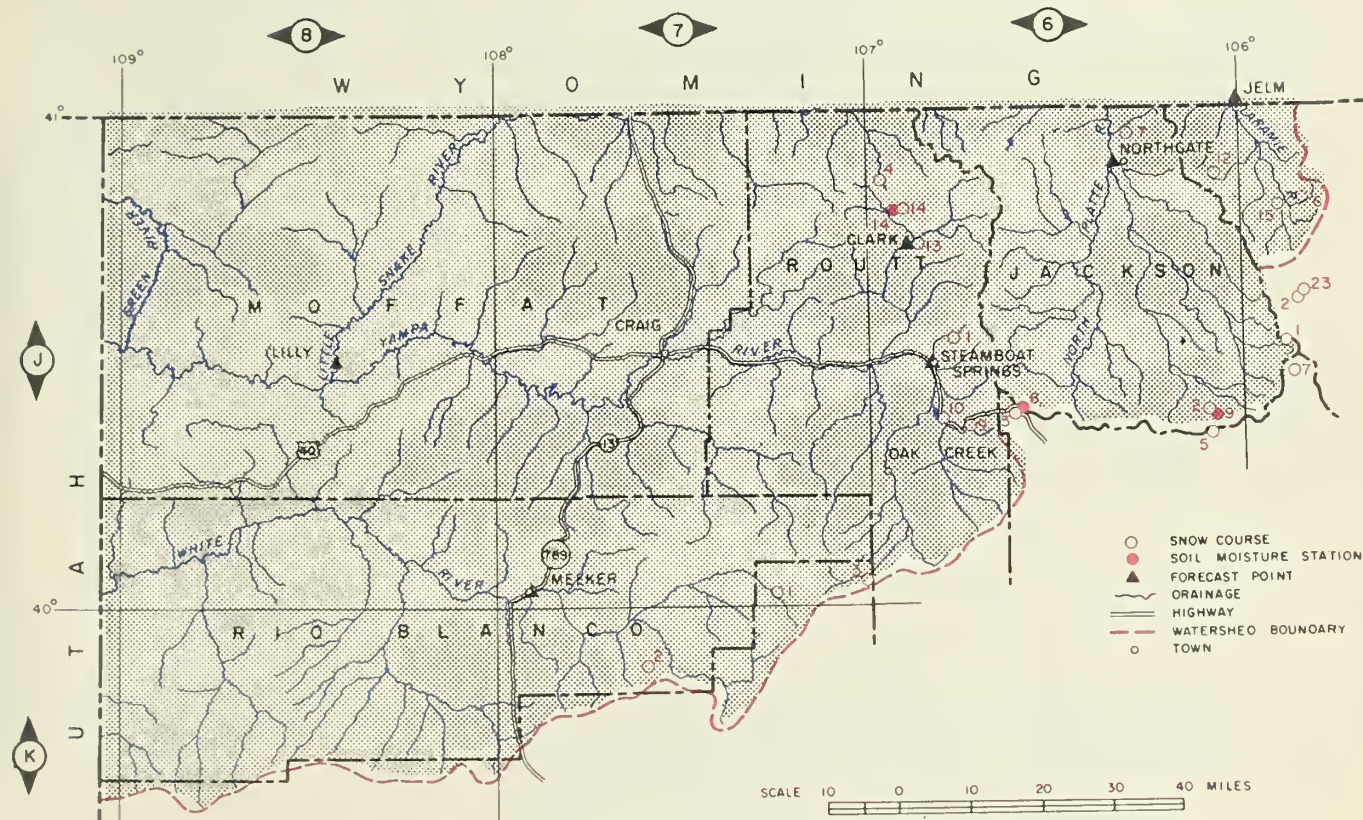
ALL PROFILES 4 FEET DEEP

PRECIPITATION

STATION	AUGUST THROUGH NOVEMBER AVE.		WINTER AVE.	
	AVE.	DEP.	AVE.	DEP.
North Platte	6.08	+3.07	2.04	+1.69
White	8.33	+3.81	4.59	+1.70
Yampa	9.93	+4.14	7.27	+1.87

PRELIMINARY U.S. WEATHER BUREAU DATA
AVERAGE OF SELECTED STATIONS

YAMPA, WHITE, & NORTH PLATTE RIVERS WATERSHEDS IN COLORADO



SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1943 - 57
NORTH PLATTE RIVER						
Cameron Pass	5J1	3/29	99	38.9	22.3	24.9
Columbine Lodge	6J3	3/26	78	30.0	17.2	24.7
Deadman Hill (B)	5J6	3/28	56	17.2	15.4	16.8
McIntyre (B)	5J15	3/13	50	15.8	8.8	11.4*
Northgate	6J7	3/28	34	8.9	4.4	6.2*
Park View	6J2	3/28	42	13.4	7.8	9.7
Roach (B)	6J12	3/9	84	26.0	NS	20.0
Willow Creek Pass (B)	6J5	3/28	54	18.0	9.8	13.6
YAMPA RIVER						
Bear River	7J3	3/27	49	14.7	7.1	—
Clark	6J13	3/29	45	14.9	7.0	—
Columbine Lodge (B)	6J3	3/26	78	30.0	17.2	24.7
Dry Lake	6J1	3/26	68	24.9	13.7	21.0
Elk River	6J4	3/28	59	21.3	12.8	18.2
Hahn's Peak	6J14	3/28	51	18.2	9.2	—
Lynx Pass (B)	6J6	3/28	54	19.2	8.9	12.7
Rabbit Ears	6J9	3/26	86	32.2	19.5	28.5*
Yampa View	6J10	3/26	52	18.2	9.9	15.5*
WHITE RIVER						
Burro Mountain	7K2	3/26	66	28.5	13.0	18.6
Rio Blanco	7J1	3/29	50	17.8	11.8	16.7

NOTE: * - 1943 - 57 (ADJUSTED AVERAGES)
 NS - NO SURVEY
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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

April 1, 1962

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO

SNOW COVER

Snow cover over the entire South Platte watershed averages 115% of normal. Warm temperatures and below normal snow fall during the past month decreased the low elevation snow pack since March 1. Water content of the snow pack ranges from 75% of normal at low elevations to 160% at the higher levels.

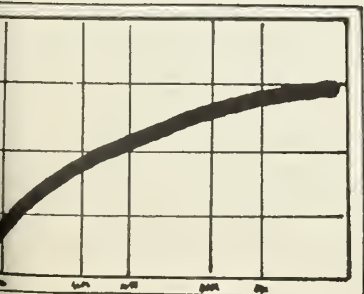
SOIL MOISTURE

Mountain soil moisture in the South Platte watershed is near a record high. This condition will increase the flow expected from melting snows. The lower valleys are all reporting excellent soil moisture.

RESERVOIR STORAGE

Water held in storage on the lower South Platte system is about 115% of average. Reservoirs on the Big Thompson project are filled to near capacity. This water will be an excellent supplement to irrigation needs this season.

EXPECTED STREAMFLOW



All tributaries to the South Platte River will flow better than average this season. Above average streamflow, excellent soil moisture, and above normal reservoir storage will assume good water supplies this irrigation season.

'THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY'

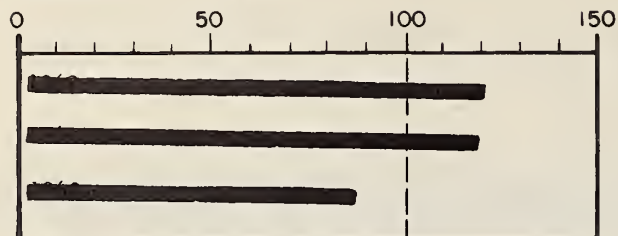
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K. W. Chalmers, State Conservationist
Colorado

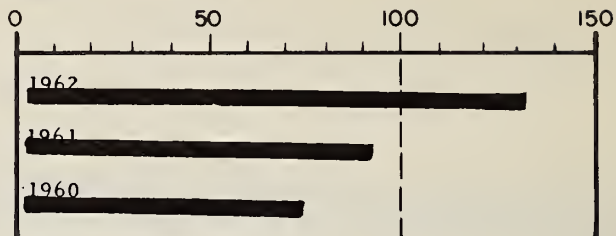
Wallace L. Bruce, Area Conservationist
Sterling, Colorado

WATER SUPPLY OUTLOOK IN PERCENT OF 1943-57 AVERAGE

UPPER SOUTH PLATTE



LOWER SOUTH PLATTE



RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1943 - 57
Carter *	108.9	102.6	85.6	64.8
Cheeseman	79.0	77.9	70.0	49.2
Eleven Mile	81.9	97.8	97.8	69.2
Empire	37.7	33.6	30.9	29.1
Horsetooth *	143.5	135.1	112.2	99.4
Jackson Lake	35.4	32.2	33.7	33.6
Julesburg	28.2	19.1	22.2	21.4
Point of Rocks	70.0	68.9	70.0	58.2
Prewitt	32.8	27.7	21.4	19.8
Riverside	57.5	56.8	56.1	47.9

* Shorter Period

Carter and Horsetooth Reservoirs are part of the Big Thompson Project

SOIL MOISTURE

STATION	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alpine Camp	7.0	3.3	1.3	1.2
Beaver Dam	6.0	4.6	0.4	1.0
Feather	6.0	0.6	0.1	0.7
Guard Station	7.0	2.7	0.4	1.0
Hoop Creek	6.0	5.1	0.5	1.4
Hoosier Pass	7.0	4.6	0.1	1.7
Kenosha Pass	7.0	1.6	0.1	1.7
Laramie Road	7.0	—	—	1.7
Two Mile	8.0	5.4	0.7	2.6
Clear Creek	8.0	4.2	0.5	1.3

ALL PROFILES 4 FEET DEEP

MEASURED FIRST OF MONTH

PRECIPITATION

STATION	AUGUST THROUGH NOVEMBER AVE.	NOVEMBER DEP.	WINTER AVE. Dec-Feb	NOVEMBER DEP.
Upper So. Pl.	8.07	+3.71	2.06	+.47
Lower So. Pl.	7.15	+2.52	.92	-.18

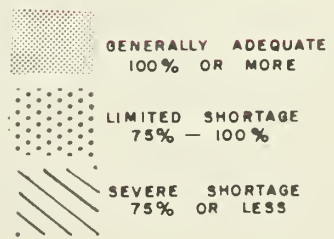
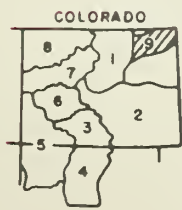
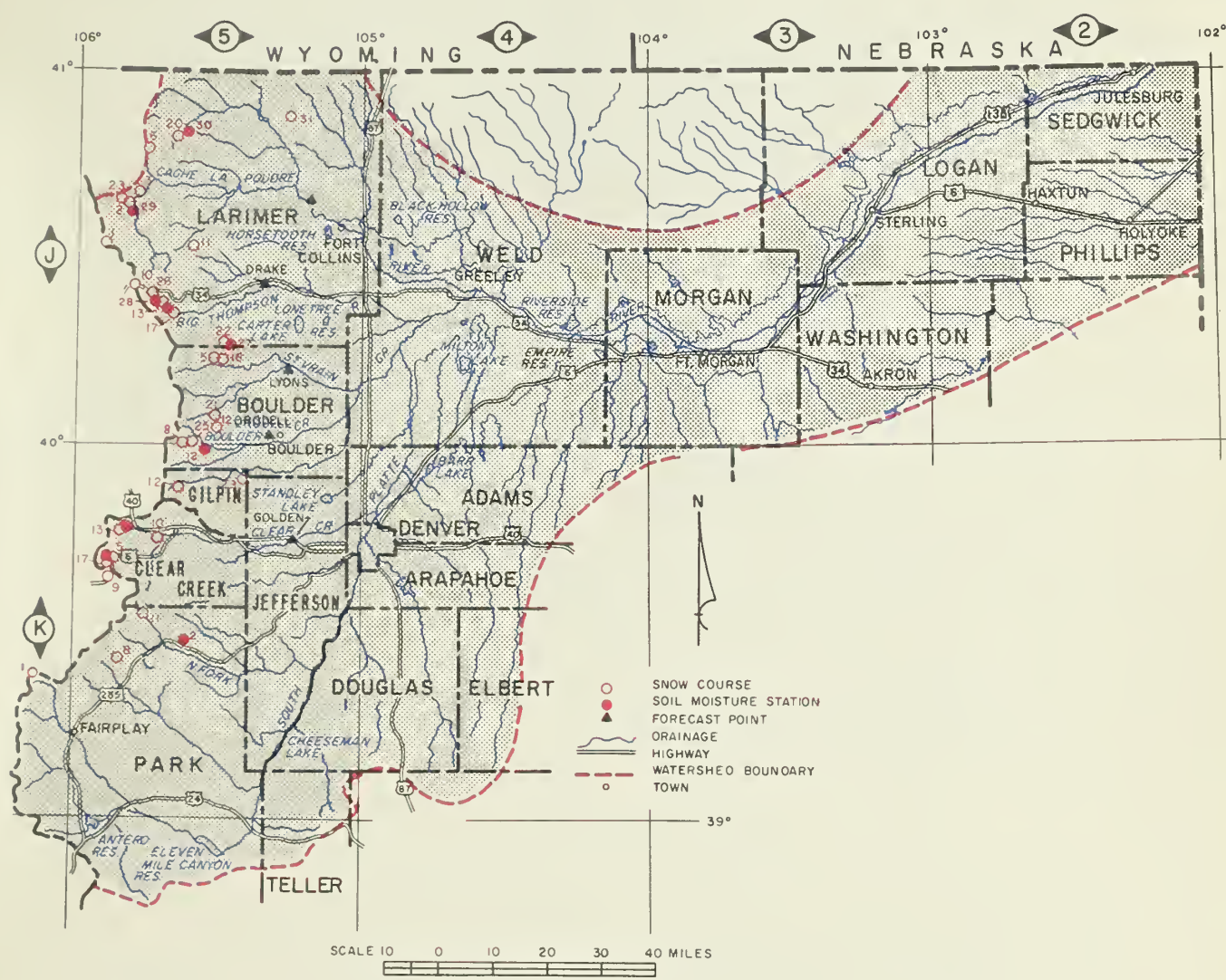
PRELIMINARY U.S. WEATHER BUREAU DATA
AVERAGE OF SELECTED STATIONS

STREAMFLOW FORECAST

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1943-57
Big Thompson at Drake (2)	142	134	106
Boulder at Orodell	64	116	55
Cache La Poudre at Canon(1)	210	111	189
Clear Creek at Golden (3)	180	130	137
Saint Vrain at Lyons	93	111	84

LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO



SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1943 - 57
SOUTH PLATTE RIVER AND TRIBUTARIES						
Baltimore	5K23	3/30	31	9.1	7.8	—
Berthoud Falls	5K13	3/30	48	13.2	10.7	14.6*
Big South	5J3	4/1	9	2.1	2.6	2.7
Boulder Falls	5J25	3/30	47	12.5	11.6	15.4*
Cameron Pass	5J1	3/29	99	38.9	22.3	24.9
Chambers Lake	5J2	4/1	37	10.1	6.7	8.8
Copeland Lake	5J18	3/29	13	4.0	4.3	5.3*
Deadman Hill	5J6	3/28	56	17.2	15.4	16.8
Deer Ridge	5J17	3/31	29	9.4	4.3	5.9*
Empire	5K10	3/30	36	9.7	8.0	7.8*
Geneva Park	5K11	NS	--	--	2.6	4.2*
Grizzly Peak (B)	5K9	3/27	64	21.3	16.3	18.9
Hidden Valley	5J13	3/30	53	16.1	10.3	12.4
Hoosier Pass	6K1	3/30	49	15.3	10.4	13.1
Hour Glass Lake	5J11	3/28	26	6.9	6.2	9.2
Jefferson Creek	5K8	3/28	37	11.7	8.4	9.8
Lake Irene (B)	5J10	3/27	74	31.7	14.1	22.9
Long's Peak	5J22	3/31	43	11.8	7.3	11.7*
Lost Lake	5J23	4/1	47	13.1	8.5	11.8*
Loveland Pass	5K5	3/29	55	19.2	15.3	15.8
Loveland Lift No. 1	5K24	3/27	88	30.7	21.5	--
Pine Creek	5J31	3/29	6	2.3	5.2	--
Red Feather	5J20	3/29	29	7.6	8.9	8.8
Two Mile	5J26	3/30	70	23.3	11.9	15.3*
University Camp	5J8	3/30	65	21.5	16.5	24.5
Ward	5J21	3/29	25	6.8	7.5	7.1*
Wild Basin	5J5	3/30	41	10.1	11.1	15.0

NOTE: * - 1943 - 57 (ADJUSTED AVERAGES)

NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by
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 Colorado State University
 Ft. Collins, Colorado

RETURN IF NOT DELIVERED

UNITED STATES

DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey
 Colorado State University
 Ft. Collins, Colorado

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
 U.S. DEPARTMENT OF AGRICULTURE

LIST OF COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

Forest Service
Soil Conservation Service

Department of Interior

Bureau of Reclamation
Geological Survey
National Park Service
Indian Service

Department of Commerce

Weather Bureau

War Department

Army Engineer Corps

Atomic Energy Commission

PUBLIC UTILITIES

Colorado Public Service Company
Western Colorado Power Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

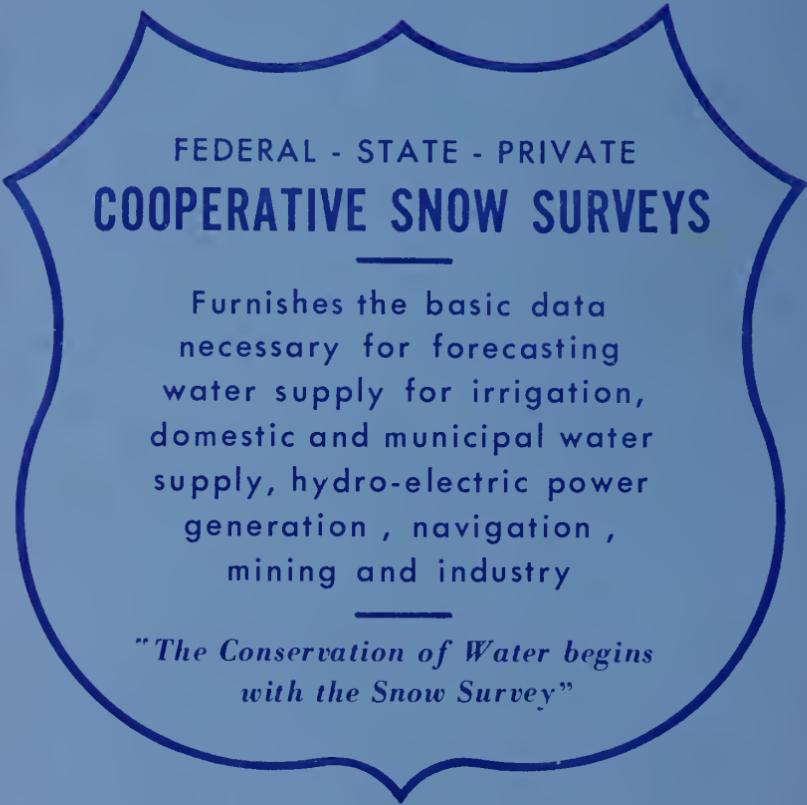
IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
240 SOUTH HALL
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO

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U. S. DEPARTMENT OF AGRICULTURE

FIRST CLASS MAIL



FEDERAL - STATE - PRIVATE
COOPERATIVE SNOW SURVEYS

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation , navigation ,
mining and industry

*"The Conservation of Water begins
with the Snow Survey"*